



# MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

July 28, 2017

## Public Health Preparedness and Situational Awareness Report: #2017:29 Reporting for the week ending 07/22/17 (MMWR Week #29)

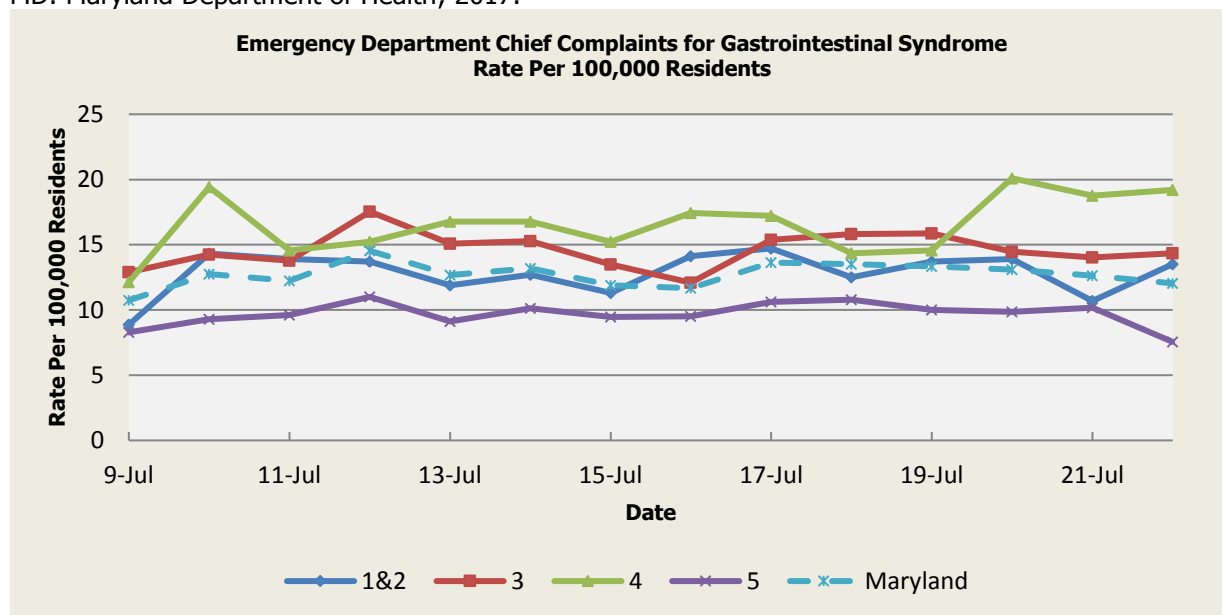
### CURRENT HOMELAND SECURITY THREAT LEVELS

**National:** No Active Alerts

**Maryland:** Level Four (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

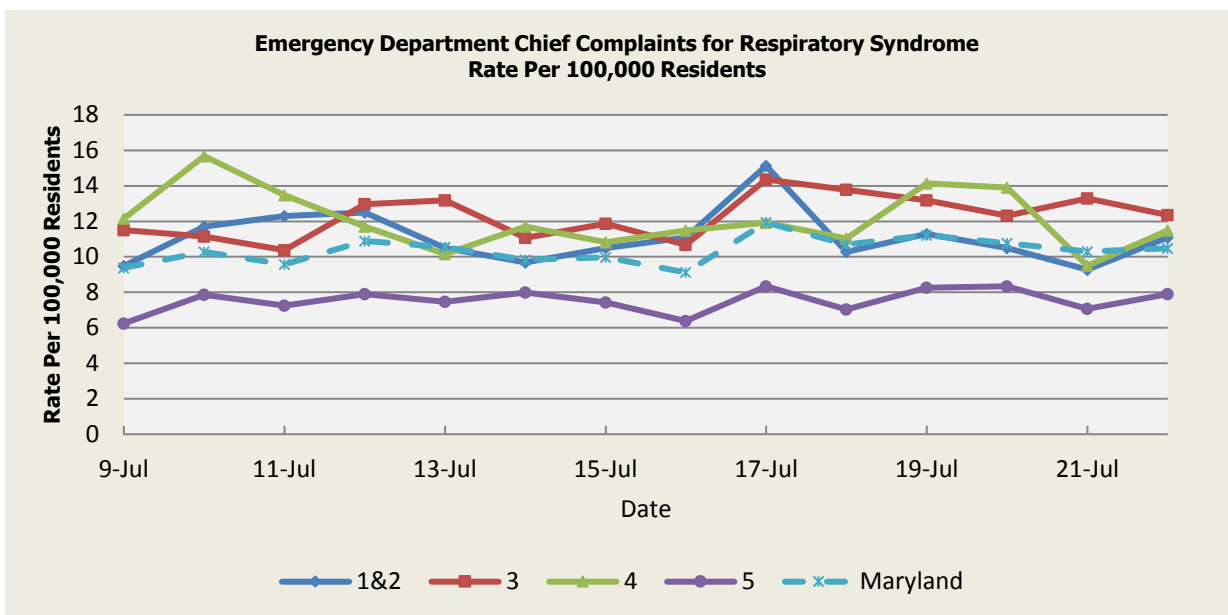
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Camp (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.52	14.65	14.96	9.99	12.71
Median Rate*	12.91	14.80	15.02	10.22	12.95

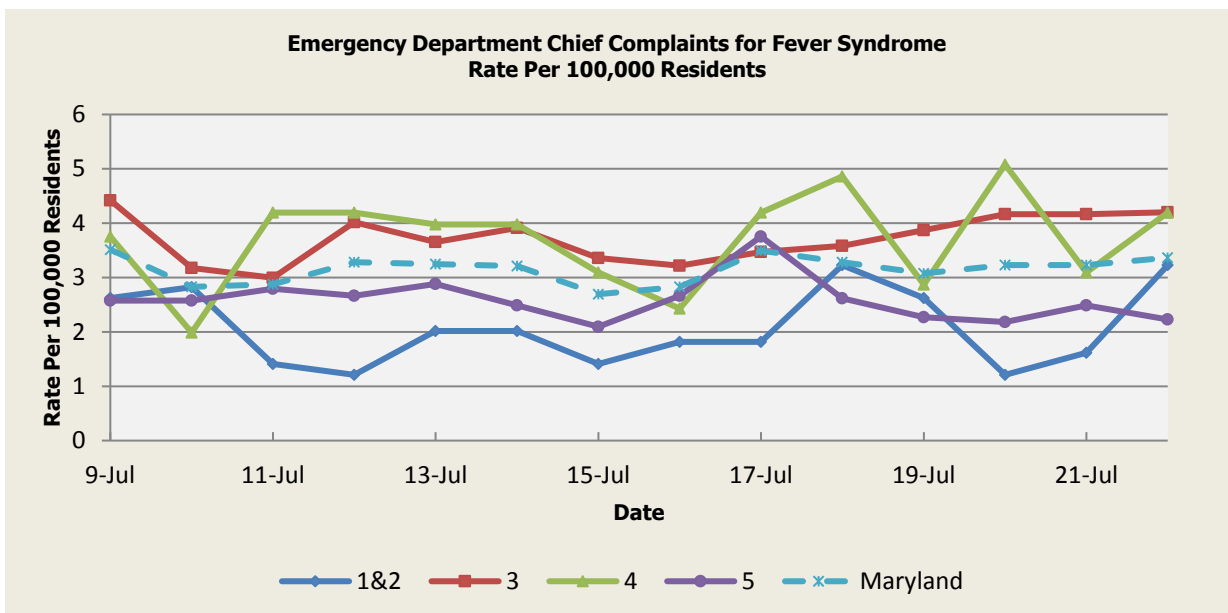
\* Per 100,000 Residents



There was one Respiratory Syndrome outbreak reported this week: one (1) outbreak of Pneumonia in a Nursing Home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.68	14.01	13.91	9.66	12.14
Median Rate*	11.70	13.88	13.91	9.65	12.05

\* Per 100,000 Residents

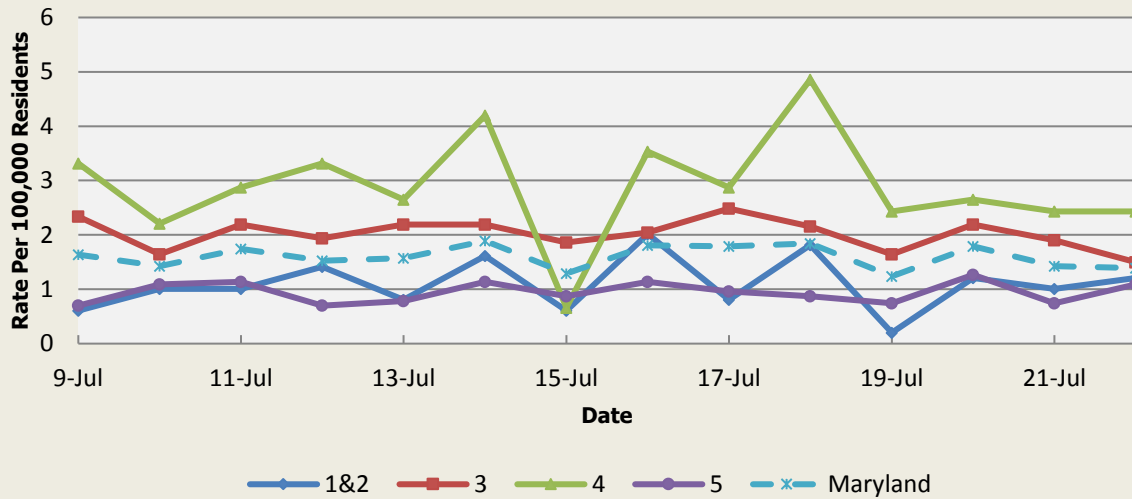


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.94	3.76	3.86	2.99	3.40
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

### Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



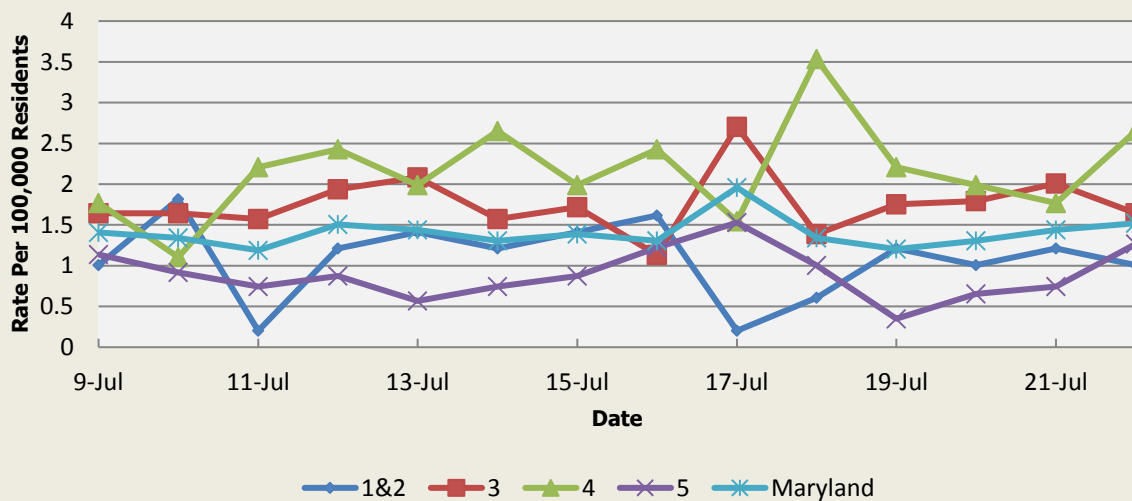
There were no Localized Lesion Syndrome outbreaks reported this week.

#### Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.01	1.83	1.96	0.93	1.43
Median Rate*	1.01	1.83	1.99	0.92	1.42

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

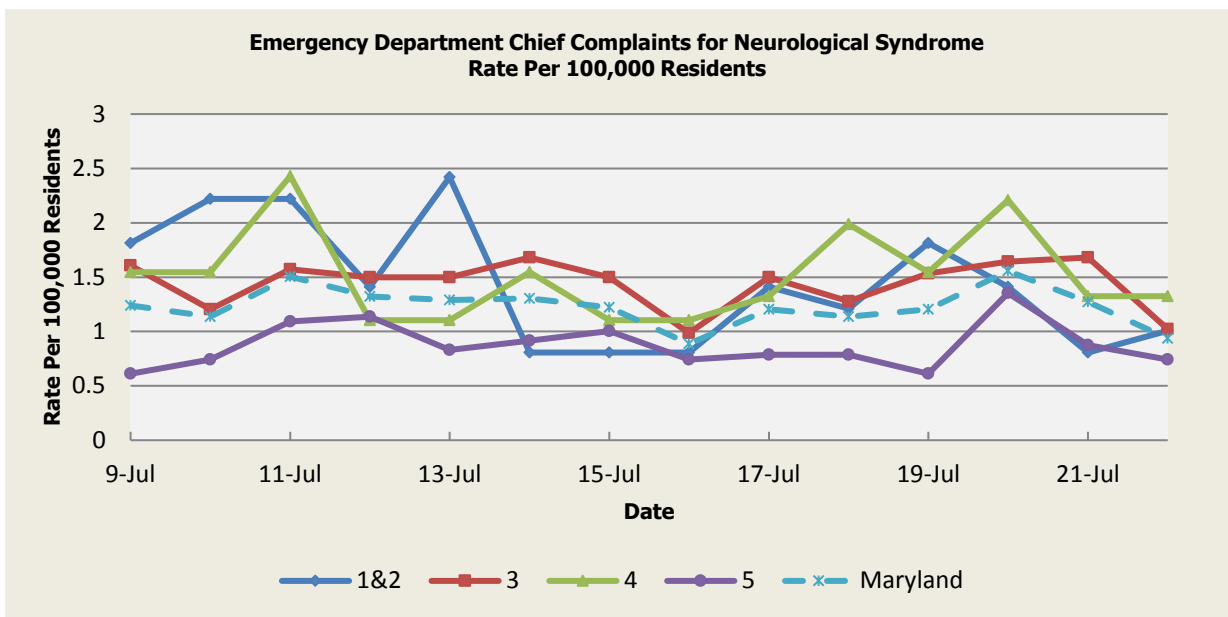


There were two (2) Rash Syndrome outbreaks reported this week: one (1) outbreak of Scabies associated with a Nursing Home (Region 4); one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 3).

#### Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.21	1.70	1.71	1.00	1.39
Median Rate*	1.21	1.68	1.77	1.00	1.39

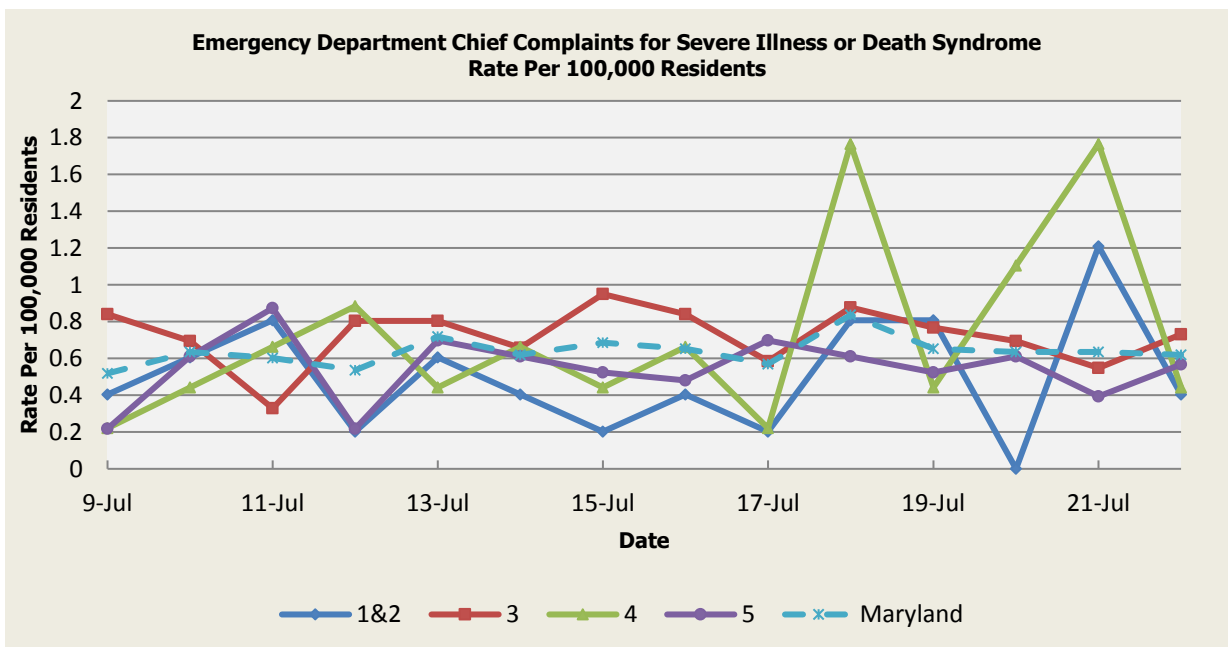
\* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.77	0.67	0.49	0.65
Median Rate*	0.60	0.69	0.66	0.48	0.59

\* Per 100,000 Residents

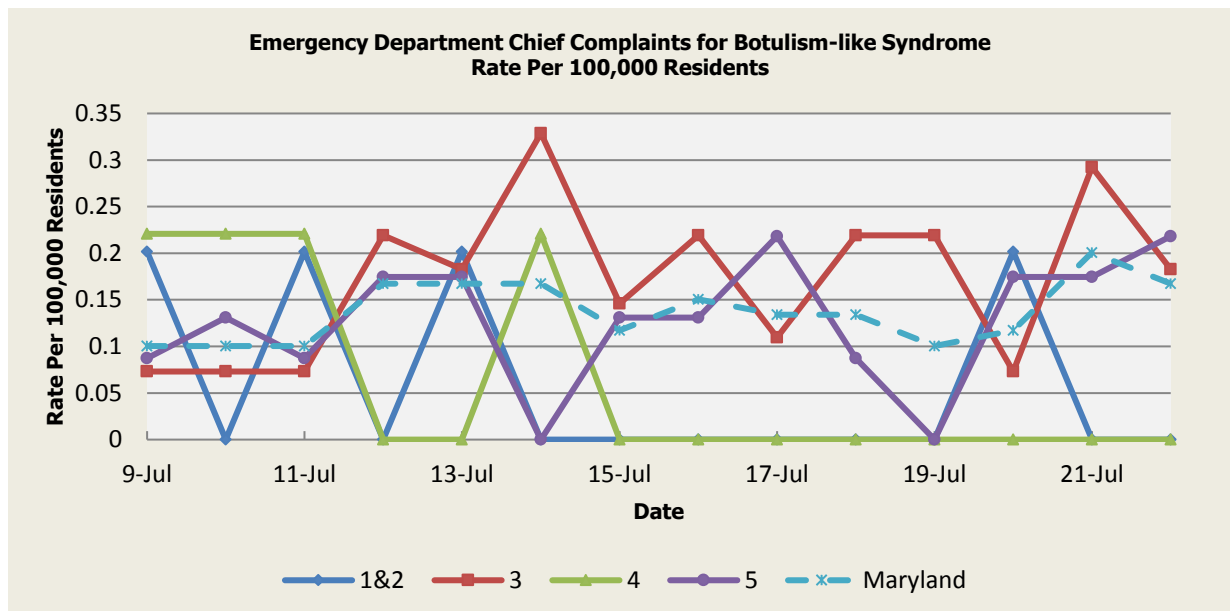


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.89	0.78	0.45	0.69
Median Rate*	0.60	0.91	0.66	0.44	0.70

\* Per 100,000 Residents

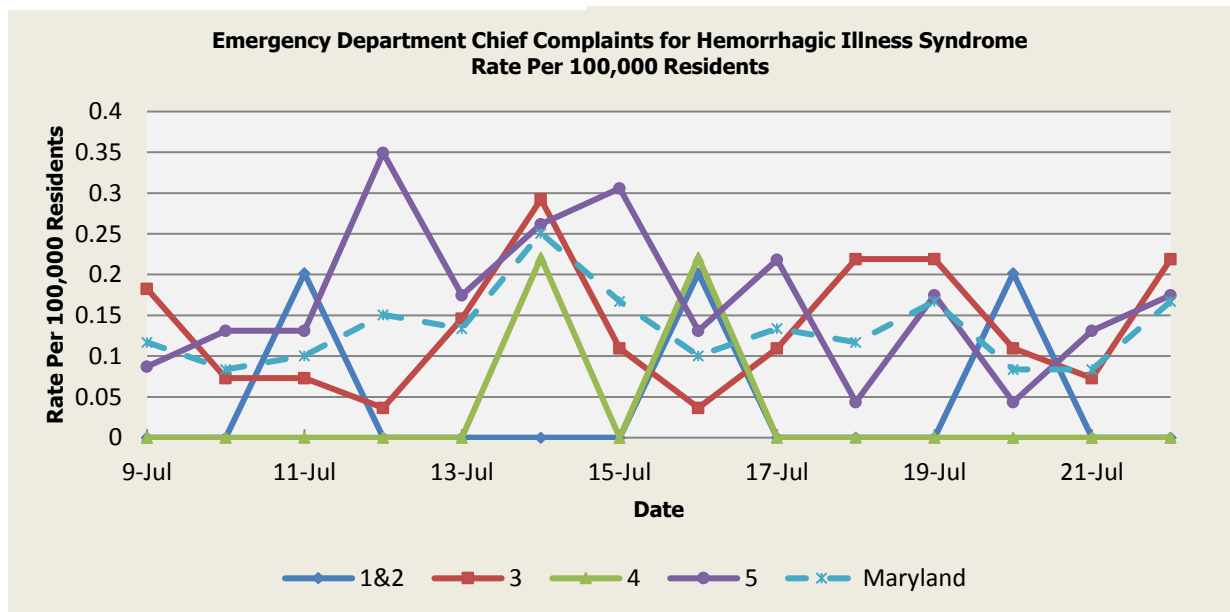
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 07/09 (Regions 1&2,4), 07/10 (Region 4), 07/11 (Regions 1&2,4), 07/12 (Region 3), 07/13 (Regions 1&2,3), 07/14 (Regions 3,4), 07/16 (Region 3), 07/18 (Region 3), 07/19 (Region 3), 07/20 (Regions 1&2), 07/21 (Region 3), 07/22 (Region 3). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

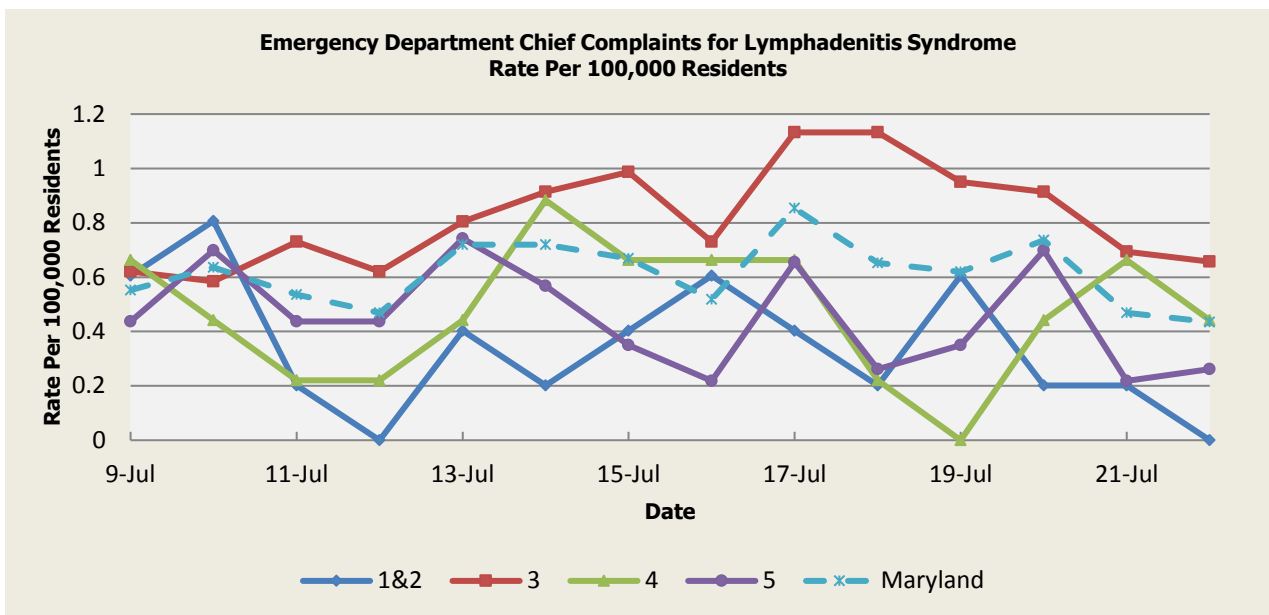
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 07/11 (Regions 1&2), 07/12 (Region 5), 07/14 (Regions 3,4,5), 07/15 (Region 5), 07/16 (Regions 1&2,4), 07/17 (Region 5), 07/20 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.13	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 07/09 (Regions 1&2), 07/10 (Regions 1&2,5), 07/13 (Region 5), 07/14 (Region 4), 07/16 (Regions 1&2), 07/17 (Regions 3,5), 07/18 (Region 3), 07/19 (Regions 1&2), 07/20 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.51	0.34	0.31	0.40
Median Rate*	0.20	0.40	0.22	0.26	0.33

\* Per 100,000 Residents

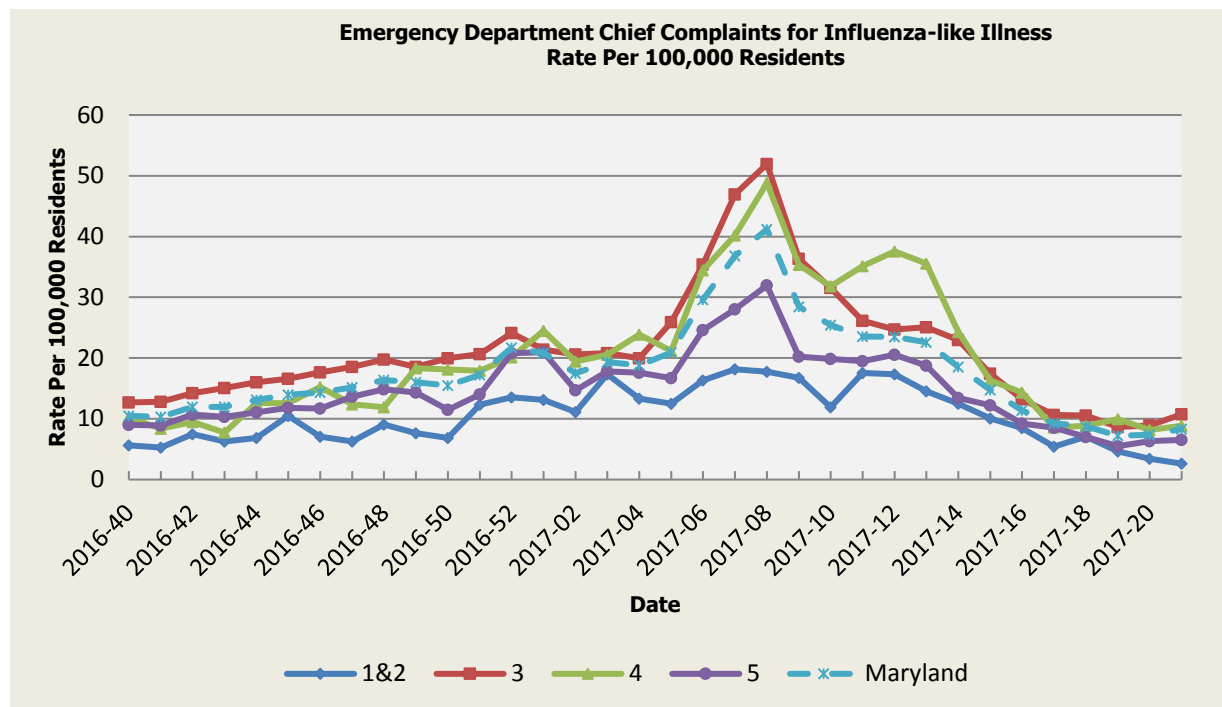
## MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	July			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	26	37.4	30	168	225.6	211
Meningococcal disease	0	0.2	0	4	3.2	3
Measles	0	0	0	4	3.8	3
Mumps	1	1.2	0	21	34.4	14
Rubella	0	0	0	1	3.6	3
Pertussis	13	21	20	126	173.2	178
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	57	95.2	93	389	470	452
Shigellosis	12	12.6	12	136	112.8	136
Campylobacteriosis	60	75.2	74	445	425.8	439
Shiga toxin-producing Escherichia coli (STEC)	17	14.6	12	92	81.2	78
Listeriosis	1	2.4	2	13	7.8	7
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	1	0.6	0	1	3.4	2
Lyme Disease	303	396.2	406	1924	1782.6	1720
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0.6	0	0	2.6	0
Dengue Fever	0	1.8	1	6	14.6	9
Zika Virus***	0	2.4	1	1	8.2	5
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	9	19.8	22	116	97.2	91

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change \*Timeframe of 2011-2017\*\*Includes January through current month. \*\*\* As of July 27, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 40.

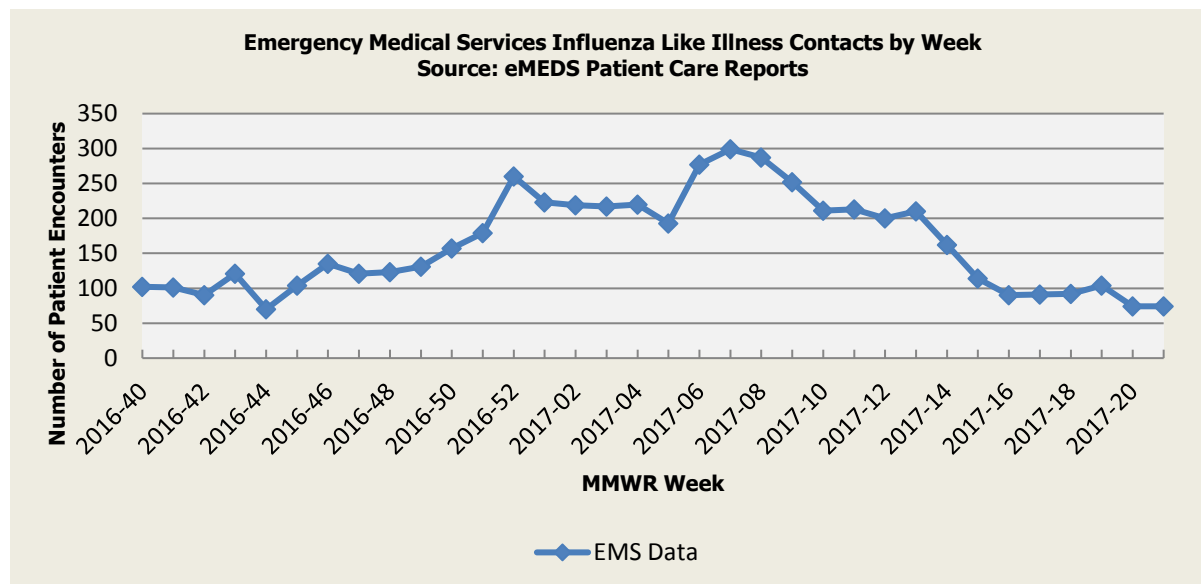
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



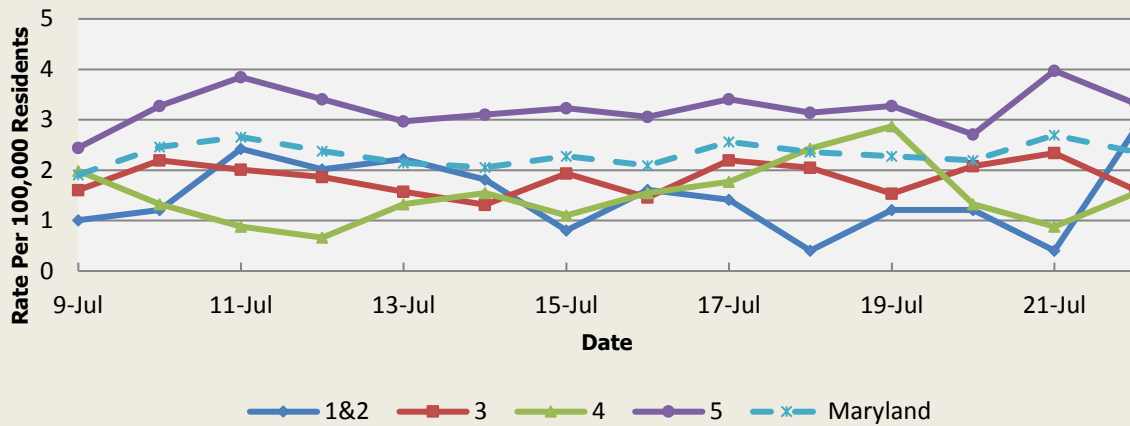
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

\* Per 100,000 Residents



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

### Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

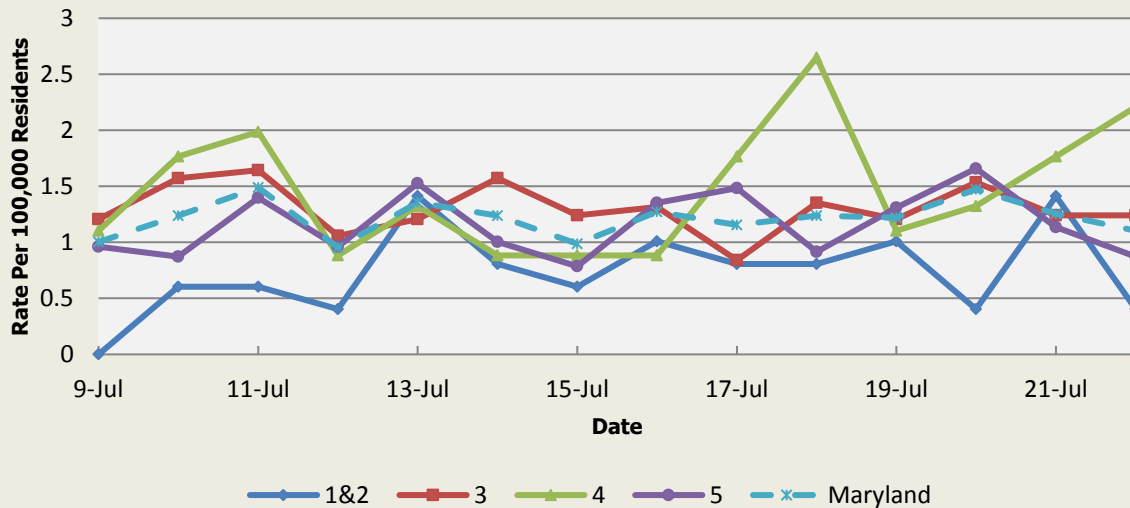


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.66	4.76	2.65	8.19	5.82
Median Rate*	3.23	4.38	2.43	8.03	5.52

\* Per 100,000 Residents

### Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

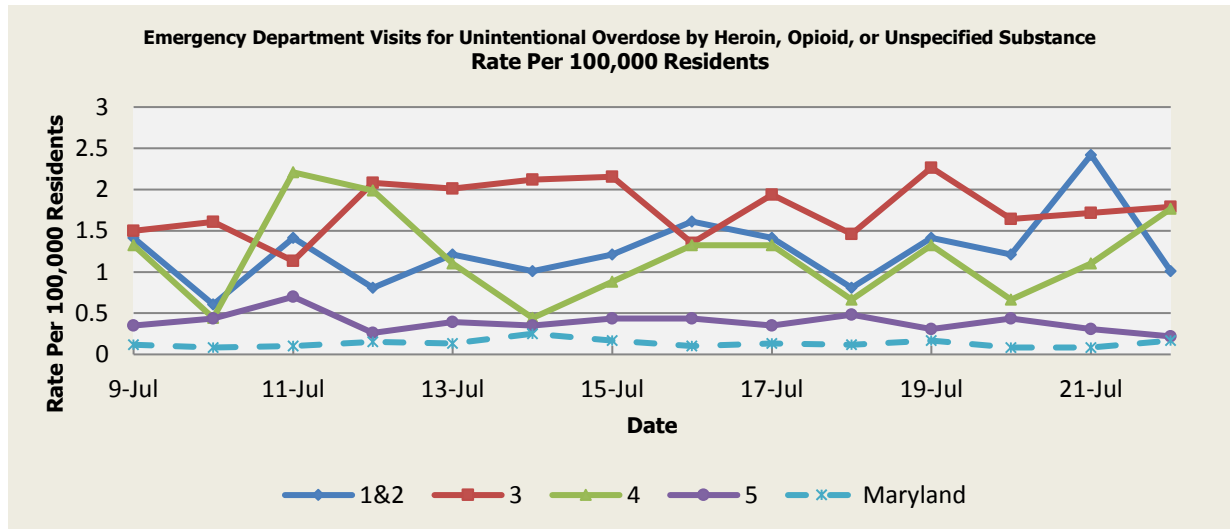
Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.27	3.13	2.42	4.19	3.50
Median Rate*	3.02	3.03	2.43	4.06	3.36

\* Per 100,000 Residents



## SYNDROMIC OVERDOSE SURVEILLANCE

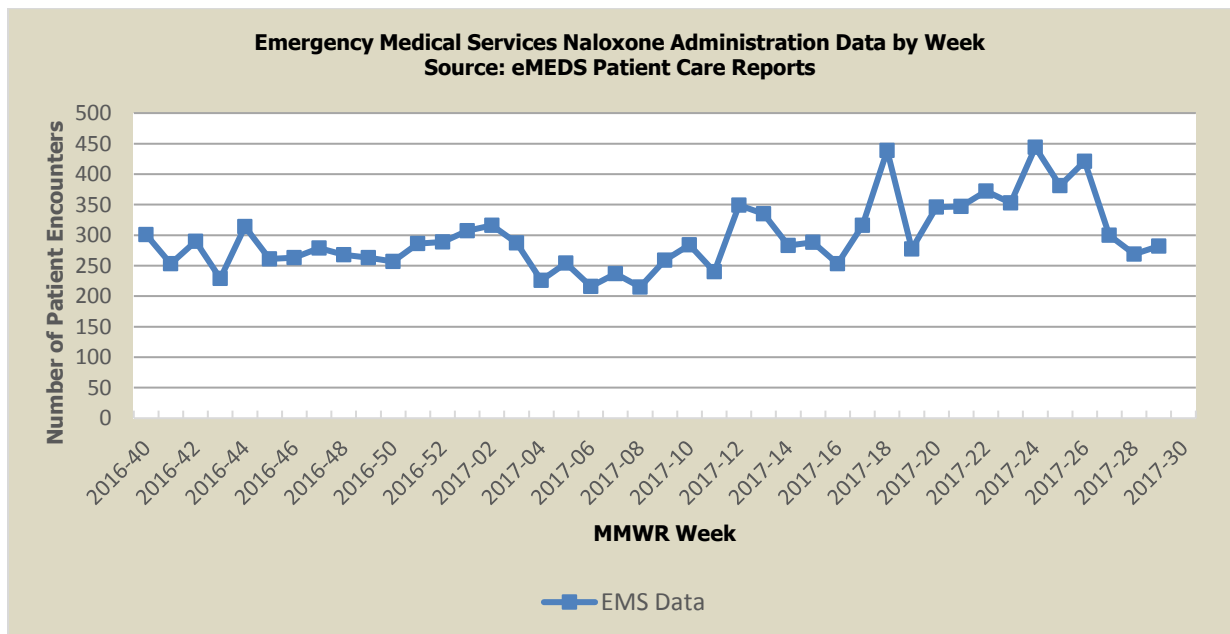
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

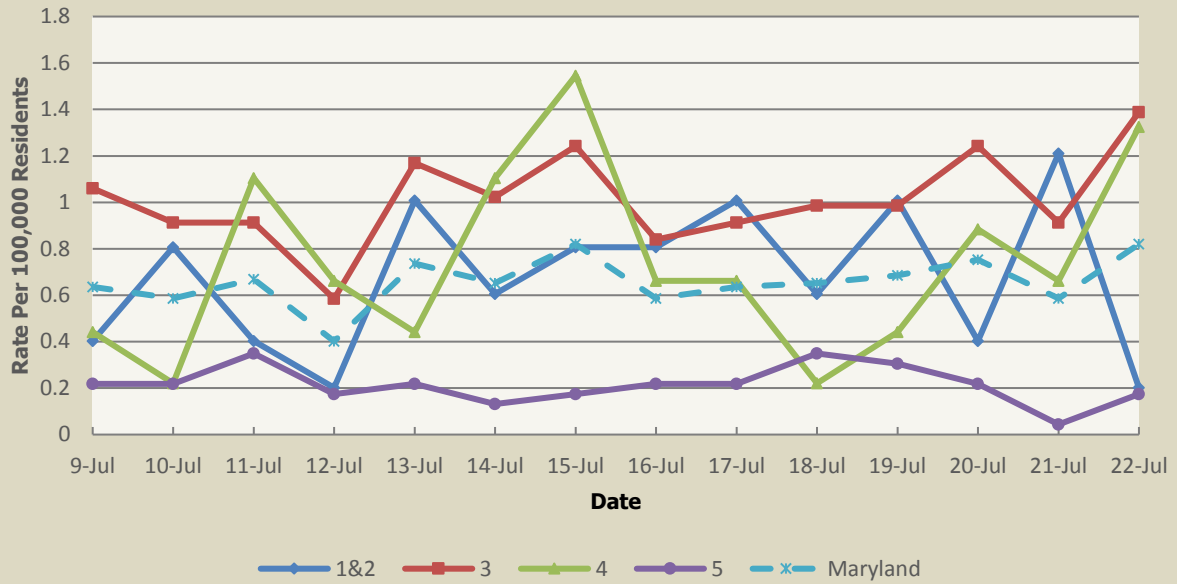
Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.32	0.41	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

**Emergency Medical Services Naloxone Administration Data**  
**Rate Per 100,000 Residents**  
Source: eMEDS Patient Care Reports



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.32	0.41	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of June 15, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA:**

*There were no reports of avian influenza in the United States or internationally at the time that this report as compiled.*

### **HUMAN AVIAN INFLUENZA:**

*There were no reports of human cases of avian influenza in the United States or internationally at the time that this report as compiled.*

### **NATIONAL DISEASE REPORTS:**

**INFLUENZA, SWINE (WISCONSIN),** 22 July 2017, The Wisconsin Department of Agriculture has issued a state animal health alert after several show pigs tested positive for influenza while being exhibited at the Stoughton Fair. The agency says the animals were tested after returning to their home farm. The fair took place 4-9 Jul. Veterinarians are asked to be on alert for sick pigs and made aware that pigs showing clinical signs of illness are not allowed at fairs and shows. DATCP officials say they were not aware of any human illnesses as a result of the incident, though swine influenza can be zoonotic. Read More: <https://www.promedmail.org/post/5196850>

**EASTERN EQUINE ENCEPHALITIS (GEORGIA),** 22 July 2017, The Georgia Department of Health has confirmed a horse in Brooks County has tested positive for Eastern Equine Encephalitis. Now, health officials are asking you to make sure you wear mosquito spray when you go outside. The illness causes inflammation of the brain, which often starts as headaches. While there are no vaccines for humans to prevent mosquito-borne illness, horses can get vaccines for Eastern Equine Encephalitis and the West Nile Virus. Read More: <https://www.promedmail.org/post/5197563>

**SALMONELLOSIS (PAPAYAS),** 22 July 2017, Public health investigators are using the PulseNet system to identify illnesses that may be part of this outbreak. PulseNet is the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC. DNA fingerprinting is performed on *Salmonella* bacteria isolated from ill people by using techniques called pulsed-field gel electrophoresis and whole genome sequencing. 47 people infected with the outbreak strain of *S. Kiambu* have been reported from 12 states. Read More: <https://www.promedmail.org/post/5197237>

**PLAGUE (ARIZONA, TEXAS)**, 23 July 2017, The bacterium that causes the disease, *Yersinia pestis*, was found in fleas collected from prairie dog burrows earlier this month, July 2017. The burrows are located on the south side of Highway 61, on ranch land in Concho, Apache County. The disease caused a die-off in several prairie dog colonies in the area. Read More: <https://www.promedmail.org/post/5197563>

**H3N2 (OHIO)**, 23 July 2017, Clinton County Health Commissioner Pamela Walker Bauer reported there now are 11 lab-confirmed cases of the H3N2 flu virus in people. Lab testing by the Centers for Disease Control and Prevention is still underway to see whether there is a connection to the specific variation of the swine flu found at the fair, she said. A total of about 13 people were reported sick with flu-like illness to the Clinton County Health District, but 2 of them did not test positive for the H3N2 flu virus. Read More: <https://www.promedmail.org/post/5196928>

**HEPATITIS A (COLORADO)**, 25 July 2017, The 7 cases currently confirmed in Pueblo County marks the 3rd highest number of any county in the state trailing only El Paso County with 10 and Adams County with 9. The number marks a drastic increase in Pueblo County; the health department recorded only 1 case in 2013 and 2 cases in 2016, with no reported cases in either 2014 or 2015. Read More: <https://www.promedmail.org/post/5201341>

**VIBRIO VULNIFICUS (WASHINGTON, ALABAMA)**, 26 July 2017, A local man has been sickened by a rare form of flesh-eating bacteria linked to fish from grocery store tanks. This is the 2nd such case in the area recently; a woman was sickened by *Vibrio vulnificus* in November 2016 after cutting her hand while preparing tilapia purchased at a Bellevue seafood store. The woman sickened in the Bellevue case eventually recovered. Read More: <https://www.promedmail.org/post/5201340>

#### **INTERNATIONAL DISEASE REPORTS:**

**CRIMEAN-CONGO HEMORRHAGIC FEVER (IRAN)**, 22 July 2017, At least 80 people in Iran have caught the Crimean-Congo hemorrhagic fever since Tue 21 Mar 2017, Karim Amiri, an official with the Islamic Republic's veterinary organization, said. The fever has caused the death of 5 people in Iran since the beginning of the current Iranian fiscal year. Since 2000, at least 988 cases of Crimean-Congo fever have been reported in Iran, according to the Iranian officials. Read More: <https://www.promedmail.org/post/5192440>

**HEPATITIS A (ISRAEL)**, 22 July 2017, Between December 2016 and July 2017, 19 Hepatitis A virus (HAV)-positive cases, 17 of which were among men who have sex with men (MSM) were identified in the Tel Aviv area. Seven of the 15 sewage samples collected between January and July 2017 were also HAV-positive. All sequences clustered with 2 of the 3 strains identified in the current European HAV outbreak. We demonstrate that despite an efficient vaccination program, HAV can still be transmitted to an unvaccinated high-risk population. Read More: <https://www.promedmail.org/post/5197306>

**YELLOW FEVER (BOLIVIA)**, 23 July 2017, The Director General of Health Services of the Ministry of Health, Rodolfo Rocabado, reported this Friday that the 5th case of yellow fever was registered in the country. He referred to the 1st registered case in Cochabamba that now was controlled. "We have another case in Cochabamba. The total at the national level will be 5 cases. In the La Paz department, 4 are reported, one in Cochabamba. Historically, cases have occurred in Cochabamba, Beni and La Paz." Read More: <https://www.promedmail.org/post/5198910>

**CRIMEAN-CONGO HEM. FEVER (PAKISTAN)**, 24 July 2017, Mrs. H.A. a 30yrs old female daughter of A.D has been reported as positive for CCHF by Virology Laboratory of National Institute of Health (NIH), Islamabad. The patient belongs to Kalakahar, Chakwal in Punjab. She was admitted with high-grade fever, body-aches and hemorrhagic manifestations on [Wed 19 Jul 2017]. She had a few domestic animals at home. The patient is stable and still admitted and the case response has been initiated at local areas by the district health department. Read More: <https://www.promedmail.org/post/5200783>

**CRIMEAN-CONGO HEM. FEVER (SENEGAL)**, 26 July 2017, Health officials have reported on a single case of Crimean-Congo hemorrhagic fever (CCHF) was confirmed in a young, 10-year-old shepherd (caring for 26 head of cattle) in Fatick District, Kamsaté, Senegal. The child developed fever, headache, arthralgia, muscle pain, and vomiting on 29 Jun 2017. Upon presentation to a local clinic on 30 Jun 2017, he was febrile and lethargic with moderate epistaxis (nose bleed). Read More: <https://www.promedmail.org/post/5205146>

**CHIKUNGUNYA (PAKISTAN)**, 26 July 2017, The WHO has reported more than 6618 cases of chikungunya in Pakistan since December 2016. However, this report does not provide location details. Read More: <https://www.promedmail.org/post/5205157>

### **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website: <http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>  
\*\*\*\*\*

**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

#### **Prepared By:**

Office of Preparedness and Response, Maryland Department of Health  
300 W. Preston Street, Suite 202, Baltimore, MD 21201  
Fax: 410-333-5000

Anikah H. Salim, MPH, CPH  
Biosurveillance Epidemiologist  
Office: 410-767-2074  
Email: [Anikah.Salim@maryland.gov](mailto:Anikah.Salim@maryland.gov)

Jessica Goodell, MPH  
Temporary Epidemiology Field Assignee, CDC  
Office: 410-767-6745  
Email: [Jessica.Goodell@maryland.gov](mailto:Jessica.Goodell@maryland.gov)

Adejare (Jay) Atanda, BDS, MPH, CPH  
Biosurveillance Epidemiologist  
Office: 410-767-5668  
Email: [Adejare.Atanda@maryland.gov](mailto:Adejare.Atanda@maryland.gov)

Kamilla Keldiyarova  
Intern  
Office of Preparedness and Response  
Email: [Kamilla.Keldiyarova@maryland.gov](mailto:Kamilla.Keldiyarova@maryland.gov)

## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

